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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/774,545	01/31/2001	Leslie M. Brooks	TAN-2-1472.01.US	3228

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EXAMINER

PHILLIPS, HASSAN A

ART UNIT	PAPER NUMBER
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2151

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/774,545

Applicant(s)

BROOKS ET AL.

Examiner

Hassan Phillips

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to communications filed December 15, 2006.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114 was filed in this application after appeal to the Board of Patent Appeals and Interferences, but prior to a decision on the appeal. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on December 15, 2006, has been entered.

Response to Arguments

3. Applicant's arguments filed December 15, 2006, have been fully considered but they are not persuasive. Applicant argued: the prior art does not suggest or disclose the inventions defined by the amended claims. Examiner respectfully disagrees.

4. With regards to applicant's remarks, examiner notes applicant's independent claims have been amended to add limitations similar to that of cancelled claim 8, which previously recited "determining if a given protocol data unit is associated with a previously filtered protocol data unit and, if so, assigning the same state of data link

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compression for the given protocol data unit as for the previously filtered protocol data unit". In previous actions, examiner cited Gillon (col. 5, lines 48-57) for teaching such a limitation. Examiner maintains applicants amended claims fail to distinguish from the previously cited teachings of Gillon, since in the teachings of Gillon, a packet whose header has indicated data is compressible (i.e. a previously filtered PDU), is attached to a compression stream. The teachings of Gillon further suggest any subsequent packet whose header indicates data is compressible is automatically associated with such previous packets whose headers indicated data is compressible and is thus assigned the same state of data link compressions for the packet (i.e. the data is also attached to a compression stream).

5. Accordingly the references supplied by the Examiner in the previous office action covers the claimed limitations. The rejections are thus sustained. Applicant is requested to review the prior art of record for further consideration.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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7. Claims 1, 2, 6, 7, 9-14, 18-29, 31, are rejected under 35 U.S.C. 102(b) as being anticipated by Gillon.

8. In considering claims 1, 13, 25, and 28, Gillon discloses a computer-readable medium, an apparatus, and a method for compressing a data stream comprising: filtering protocol-specific header and control information of a protocol data unit (PDU) to determine compressibility of the contents of said protocol data unit including determining if a given protocol data unit is associated with a previously filtered protocol data unit, (col. 5, lines 48-50); based on the result of filtering, selecting a state of data link compression for the PDU to optimize compression efficiency such that if the given protocol data unit is associated with a previously filtered protocol data unit, the data link compression for the previously filtered protocol data unit is selected, (col. 5, lines 52-56); and associating the selected state of data link compression with the protocol data unit to control a compression process adapted to compress contents of protocol data units, (col. 2, lines 21-31).

9. In considering claims 2, 14, and 26, the method of Gillon teaches compressing the contents of the PDU as a function of the state of data link compression. See col. 5, lines 52-56.

10. In considering claims 6 and 18, it is inherent in the method taught by Gillon that a table is accessed having entries with specific media types deemed compression limited. See col. 5, lines 39-50.

11. In considering claims 7 and 19, it is also inherent in the method taught by Gillon that filtering includes associating individual PDU's to specific media types. See col. 5, lines 48-56.

12. In considering claim 20, the method of Gillon teaches a tracking unit to determine if a given PDU is associated with a previously filtered PDU. See col. 5, lines 48-57.

13. In considering claims 9 and 21, it is inherent in the method taught by Gillon that a table is accessed including information of previously filtered PDU's, when determining if a given PDU is associated with a previously filtered PDU. See col. 5, lines 48-56.

14. In considering claims 10 and 22, it is also inherent in the method taught by Gillon that data link compression is disabled if the compressibility of the contents of the PDU is determined to be low. See col. 5, lines 48-56.

15. In considering claims 11 and 23, the method of Gillon teaches enabling data link compression if the compressibility of the contents of the PDU is determined to be high. See col. 5, lines 48-56.

16. In considering claims 12 and 24, the method of Gillon further teaches utilizing tables initialized with patterns expected to be contained in the content of the PDU, and used by the data link compression. See col. 5, lines 33-38.

17. In considering claim 27, Gillon further discloses decompressing the compressed contents of the PDU, col. 5, lines 13-17.

18. In considering claim 29, Gillon discloses a method for optimizing compression efficiency comprising: without changes to a subordinate protocol layer or changes to the higher protocol layers carried by a given protocol data unit, selectively controlling the state of a compression algorithm based on a protocol-specific header and control information of the given protocol data unit or compressibility determination of a protocol data unit associated with the given protocol data unit to determine compressibility for compressing data transported by the given protocol data unit across a connection in the data communication network to optimize the compression efficiency such that if a compressibility determination of a protocol data unit associated with the given protocol data unit is provided, the same compressibility determination is made for the given protocol data, (col. 5, lines 48-58).

19. In considering claim 31, Gillon teaches controlling the state of compression by analyzing protocol-specific header and control information of the PDU'S of the higher protocol layers. See col. 5, lines 39-50.

Claim Rejections - 35 USC § 103

20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

21. Claims 3-5, 15-17, 30, are rejected under 35 U.S.C. 103(a) as being unpatentable over Gillon in view of Christensen.

22. In considering claims 3 and 15, although the disclosed method of Gillon shows substantial features of the claimed invention, it fails to expressly disclose: indicating whether the contents of the PDU have been compressed or not.

Nevertheless, in a similar field of endeavor Christensen teaches a method for adaptive compression comprising: applying an indication in a compressed PDU to indicate whether the contents of the PDU have been compressed, (col. 5, lines 54-61).

Given the teachings of Christensen, it would have been obvious to one of ordinary skill in the art to modify the teachings of Gillon to also teach a means of

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indicating whether contents of a compressed PDU have been compressed by applying an indication in, or with, the compressed PDU. This would have provided an efficient means for the device assigned to decompress the PDU to determine whether decompression is necessary or not, Christensen, col. 5, lines 49-53.

23. In considering claims 4 and 16, Gillon further discloses decompressing the compressed contents of the PDU, col. 5, lines 13-17.

24. In considering claims 5 and 17, the combined methods taught by Gillon and Christensen with respect to claims 3, 4, 15, and 16, provide a means for decompressing the compressed contents of a PDU in a pre-negotiated manner based on the indication of whether the contents of the PDU have been compressed.

25. In considering claim 30, although the teachings of Gillon show substantial features of the claimed invention, they fail to expressly show: selectively disabling a compression process.

Nevertheless, it was well known in the art at the time of the present invention that having the ability to enable a compression process to optimize compression efficiency also suggests having the ability to disable a compression process to optimize compression efficiency. This is better exemplified in the teachings of Christensen. More specifically, Christen teaches: enabling or disabling a compression process adapted to

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compress protocol data units in an adaptive manner for optimizing compression efficiency, (col. 2, lines 1-18).

Thus, if not implicit in the teachings of Gillon, given the teachings of Christensen it would have been obvious to one of ordinary skill in the art to modify the teachings of Gillon to show selectively disabling the compression process. This would have clearly demonstrated advantages for efficiently utilizing a compression algorithm only when needed, Christensen, col. 2, lines 12-18.

Conclusion

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hassan Phillips whose telephone number is 571-272-3940. The examiner can normally be reached on Mon-Fri (8am-5pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on 571-272-3939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/HP/
2/23/07


ZARNI MAUNG
SUPERVISORY PATENT EXAMINER